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ABSTRACT

A study sponsored by the Texas Education Agency was conducted to define qualitative and quantitative indicators of school district success. Efforts were focused on: viewpoints of administrators; quality indicators examined in other states; and a review of the literature. Results and recommendations are summarized into the following categories: basic model of schooling; indicator variables; educational comparisons; statewide indicator system; and that which is successful. Data indicate that multiple measures of school district performance should be used. It was apparent that using Texas Educational Assessment of Minimum Skills (TEAMS) test scores as the sole measure of school district performance does not meet the needs of administrators. It is suggested that state-level reporting be quantitative in nature, but that school level measures be both qualitative and quantitative. A table summarizes the many indicators available for assessing educational inputs, processes, and outputs. Use of indicator variables is summarized as follows: (1) primary focus at the school level; (2) use of multiple output indicators of school performance; (3) use of multiple measurement and data collection strategies; (4) use of adaptive indicators that evolve over time; and (5) focus of the school on change and improvement over time. The bases for school comparisons are reviewed, and the utility and organization of a statewide indicator system are described. Recommendations are included for future efforts in developing a statewide indicator system. Two tables and two figures illustrate the conclusions of the study. (SLD)

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DEFINING QUALITY INDICATORS

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DEFINING QUALITY INDICATORS

Introduction & Overview

Since the TEAMS test was first implemented in the 1985-1986 school year, many educators have been concerned that TEAMS objectives might become the curriculum in Texas classrooms. This belief is echoed by many educators even today. The State Board of Education, in recognizing this, has approved several changes in the TEAMS program to address their concerns. In fact, awareness of potential problems was evident when the State Board of Education adopted the Long-Range Plan for Texas Public School Education. It stated, "minimum skills testing is not a wholly adequate measure of learning".

Obviously, other measures needed to be identified which would indicate student, school, parent, and district success. This problem is not unique to Texas. Several states are addressing similar concerns. National attention has also been forthcoming due to academic research and scholarly presentations at the American Educational Research Association Annual Meetings and in the Phi Delta Kappan.

A research study sponsored by the Texas Education Agency was conducted to define qualitative and quantitative indicators of district success. Efforts were focused in three primary areas: administrators' viewpoints; quality indicators examined in other states; and review of the research literature. Results and recommendations were summarized by: (1) basic model of schooling; (2) indicator variables; (3) educational comparisons; (4) statewide indicator system; and (5) what works?

Basic Model of Schooling

The educational process comprises three basic components: inputs, processes, and outputs (Figure 1). Inputs relate to the human and financial resources available to districts and schools. Processes comprise what is taught and how it is taught or in other words educational practices. Outputs are the consequences of schooling on students from different backgrounds or outcomes of the educational effort.

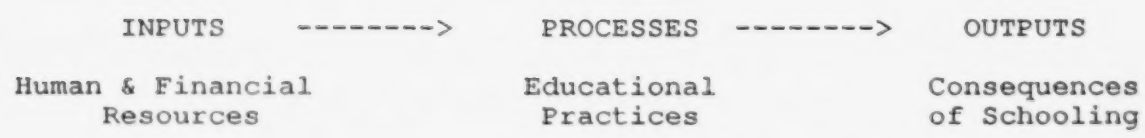

Figure 1. Basic Schooling Model

Indicator Variables

Administrators' viewpoints, examination of other states, and a review of the literature indicated that multiple measures of school district performance should be utilized. It also points out the fact that the TEAMS test score as a sole measure of school district performance does not meet the perceptions nor the needs of district wide administrators. Administrators felt that comparisons should be made between schools, but that other measures should also be adopted. Table 1 summarizes the many quantitative and qualitative indicators that are available for assessing the inputs, processes, and outputs in Figure 1. It was suggested that state level reporting be only quantitative in nature, but that school level comparisons incorporate both the quantitative and qualitative measures.

Indicator variable utilization was summarized as:

a. focus primarily at the school level
b. use multiple output indicators of school performance
c. use multiple measurement and data collection strategies
d. use of indicators should be adaptive and evolve over time
e. focus on change and improvement over time of the school

Table 1

INDICATOR VARIABLES

QUANTITATIVE

Input	Process	Output
. school funding level	. teacher attendence	. graduation rates
. school size	. teacher promotions	. drop out rates
. percent free lunch	. pupil/teacher ratio	. percent retained
. demographics of school	. teacher preparation time	. awards/recognitions
. percent hispanic	. teacher inservice training	. student test scores
. percent minority	. number of school volunteers	. attendance rates
. operating costs	. teacher salaries	. suspension rates
. programs offered	. teacher years experience	. expulsion rates
. property values	. teacher degree status	. number employed
. percent special education	. teacher certification	. number in vocational school
. socio-economic student status	. extracurricular programs	. number in college/university
. student density	. time spent on homework	. number in military
. federal aid funding level	. number of books read	. teenage pregnancy rates
. tax rates	. class size	. crime rates
. cost per pupil expenditure	. accreditation information	. computer literacy

QUALITATIVE

Input	Process	Output
. school grounds & buildings	. teacher attitudes	. teacher morale
. access and location	. administrative attitudes	. administrative morale
. community support	. instructional practices	. utilize public libraries
. student self esteem	. parent involvement	. school/business relationship
. student attitudes toward learning	. teacher committment	. student/parent satisfaction
. student attitudes toward school	. instructional leadership	. teacher/administrative relationship
. teacher expectations	. student attitudes	
	. school learning climate	
	. community support	

Educational Comparisons

There are several different perspectives for comparing schools. Comparisons could be done as follows:

a. individual school improvement over time
b. school performance compared with similar schools
c. school performance compared with district goals
d. school performance compared with state standards
e. school/district/state comparisons with other states
f. school/district/state comparisons with national standards

Each of these comparisons would require useable, useful, and comparable indicator measures. It would also require slightly different reporting formats. The reporting format should include for each quality indicator, the position of a school's measure in relation to comparable schools, the district goal, and statewide standard. Any measure selected should be reported on a common uniform scale. Indicator selection, aggregation of data, and the choice of a scale are obvious problems along with a viable report format.

Statewide Indicator System

The rationale for statewide performance standards to measure academic growth and compare schools is obvious. How this is to be accomplished and used however is open for debate. The Public Education Information Management System (PEIMS) is a step in the right direction. Figure 2 diagrams the suggested flow of information from the primary level of the school to the report, evaluation, and feedback role of the Texas Education Agency.

A statewide indicator system can be useful for many of the following:

a. examine condition of educational system over time
b. compare local, state, and national efforts
c. determine whether or not state goals are attained
d. assess implementation of policy by local schools
e. evaluate impact of policy changes
f. identify potential problems in schools and districts
g. explain causal relationship of change
h. explain how certain conditions affect outputs
i. hold teachers, schools, and districts accountable
j. reward examplar schools
k. remedy problems of poor performing schools
l. establish useful and useable reports to local schools
m. provide feedback and verification of information

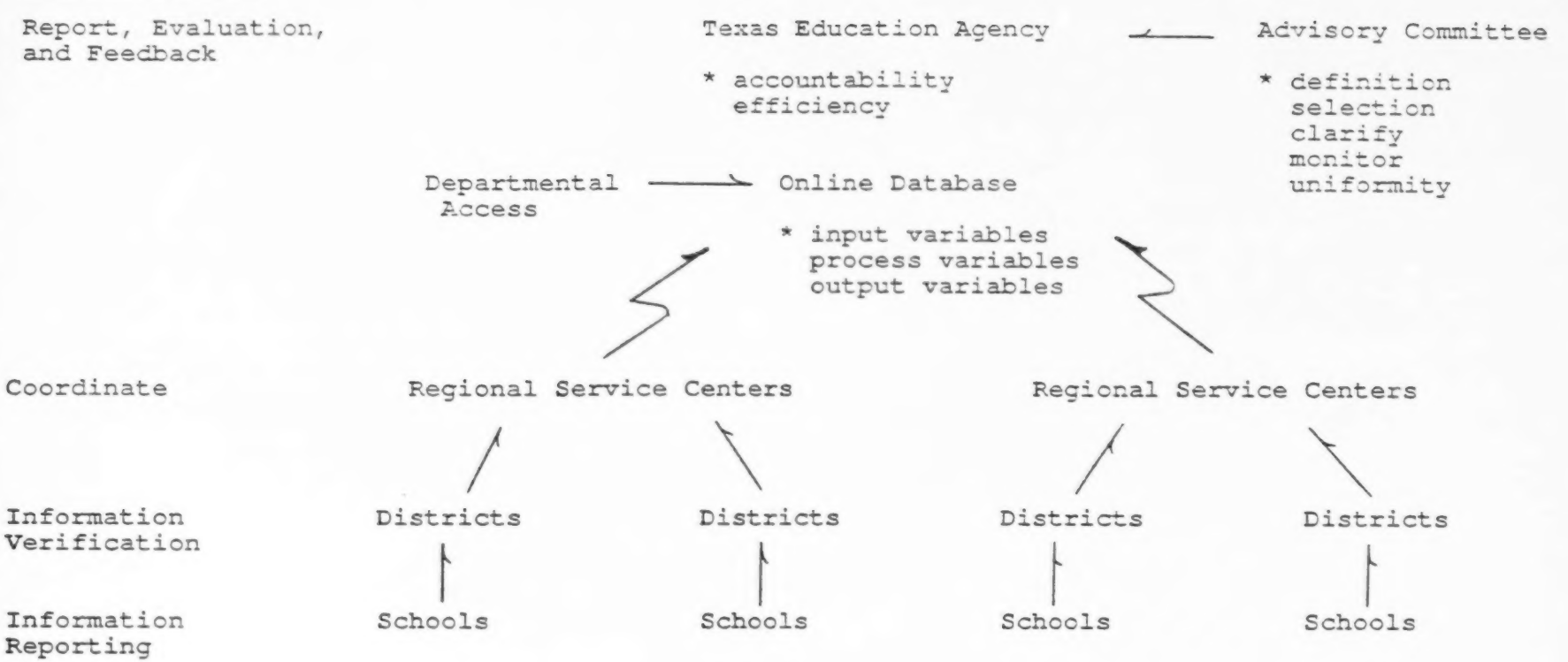

Figure 2. Statewide Indicator System

What Works?

A review of the research literature and examination of numerous state level reports indicated that the input, process, and output components of the basic model of schooling have been individually researched. The models used are summarized in Table 2.

Table 2

Evaluation Models

Input/Process	Output
Descriptive	School Recognition
Accreditation	State Standards
Self Assessment	Effective Schools

The question we need to be asking is: Are desired outcomes from input and process variables being reached? Future research efforts should be directed toward a model of schooling with a focus on analysis of the causal link between selected input, process, and output variables.

Conclusion

The systematic collection of data with useful and useable reporting at the school level should provide a statewide system of assessing the educational progress or growth of individual schools. To achieve this, a statewide indicator system; advisory committee; evaluation; and reports are necessary. Recommendations for future efforts were summarized as:

a. establish long and short term standards and goals

b. establish an advisory committee

c. select input, process, and output indicators

d. assure output indicators are comparable

e. develop an annual school profile report

f. improve statewide reporting system

g. provide improved access to centralized database

h. utilize accreditation information

i. research relationship between input, process, and output indicators